

Glu Ile Ser Phe Ala Phe Lys Ser Gly Asp Gly Glu Glu Gly Ser Ala
 305 310 315 320
 Thr Trp Ser Ser Leu Thr Ser Gln Tyr Leu Gln Gln Gln Ile Ala Ile
 325 330 335
 Thr Leu Asp Ser Gln Val Ile Ser Ala Pro Val Ile Gln Ser Ala Thr
 340 345 350
 Pro Val Gly Ser Ala Thr Ser Ile Thr Gly Asp Phe Thr Gln Thr Glu
 355 360 365
 Ala Gln Asp Leu Ala Asn Asn Leu Arg Tyr Gly Ala Leu Pro Leu Ser
 370 375 380
 Phe Ala Gly Glu Asn Gly Glu Arg Gly Gly Thr Thr Thr Val Pro
 385 390 395 400
 Pro Ser Leu Gly Ala Ala Ser Leu Lys Ala Gly Leu Ile Ala Gly Ile
 405 410 415
 Val Gly Ile Ala Leu Val Ala Ile Phe Val Phe Ala Tyr Tyr Arg Val
 420 425 430
 Phe Gly Phe Val Ser Leu Phe Thr Leu Phe Ala Ala Gly Val Leu Val
 435 440 445
 Tyr Gly Leu Leu Val Leu Leu Gly Arg Trp Ile Gly Tyr Ser Leu Asp
 450 455 460
 Leu Ala Gly Ile Ala Gly Leu Ile Ile Gly Ile Gly Thr Thr Ala Asp
 465 470 475 480
 Ser Phe Val Val Phe Tyr Glu Arg Ile Lys Asp Glu Ile Arg Glu Gly
 485 490 495
 Arg Ser Phe Arg Ser Ala Val Pro Arg Ala Trp Glu Ser Ala Lys Arg
 500 505 510
 Thr Ile Val Thr Gly Asn Met Val Thr Leu Leu Gly Ala Ile Val Ile
 515 520 525
 Tyr Leu Leu Ala Val Gly Glu Val Lys Gly Phe Ala Phe Thr Leu Gly
 530 535 540
 Leu Thr Thr Val Phe Asp Leu Val Val Thr Phe Leu Ile Thr Ala Pro
 545 550 555 560
 Leu Val Ile Leu Ala Ser Arg Asn Pro Phe Phe Ala Lys Ser Ser Val
 565 570 575
 Asn Gly Met Gly Arg Val Met Lys Leu Val Glu Glu Arg Arg Ala Asn
 580 585 590
 Gly Glu Leu Asp Glu Pro Glu Tyr Leu Lys Lys Ile His Ala Lys Asn
 595 600 605

Ala Ala Ala Asp Lys Ala Ser Thr Asp Asn Ser Ser Thr Asp Asn Ser
610 615 620

Glu Ala Pro Gly Thr Asp Thr Asn Gln Glu Glu Glu Lys
625 630 635

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<212> PRT
<213> Corynebacterium glutamicum

<220>
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<222> (1)..(403)
<223> secF

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Ala Lys Lys Arg Ser Trp Phe Asn Ser Leu Tyr Thr Gly Asp Gly Gly
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Ile Asp Phe Ile Ala Lys Thr Lys Leu Trp Tyr Trp Ile Thr Gly Ile
35 40 45

Leu Leu Val Ile Ser Ile Leu Phe Ile Ala Ile Arg Gly Phe Ser Leu
50 55 60

Ser Ile Asp Phe Gln Gly Gly Thr Lys Met Ser Met Pro Ala Ser Asp
65 70 75 80

Tyr Ser Thr Glu Gln Val Glu Glu Thr Phe Thr Glu Ala Thr Gly Ile
85 90 95

Thr Pro Glu Ile Val Gln Ile Val Gly Ser Gly Asp Ala Arg Thr Leu
100 105 110

Glu Ile Tyr Ser Glu Arg Leu Ser Asp Glu Asp Val Glu Lys Ala Arg
115 120 125

Leu Ala Ile Tyr Glu Glu Tyr Gln Pro Leu Asn Ser Glu Gly Gln Pro
130 135 140

Ser Pro Asp Ala Ile Gly Asn Ser Thr Val Ser Glu Ser Trp Gly Ser
145 150 155 160

Thr Ile Thr Gln Arg Met Val Leu Ala Leu Ile Ala Phe Leu Val Ile
165 170 175

Ala Ala Ile Tyr Ile Ala Phe Arg Leu Glu Arg Glu Met Ala Ile Ala
180 185 190

Ala Met Ala Ala Leu Val Val Asp Gly Ile Val Ile Ala Gly Ile Tyr
195 200 205

Ala Val Ile Gly Leu Glu Val Ser Pro Ala Thr Val Ile Gly Leu Leu
 210 215 220

Thr Val Leu Thr Phe Ser Ile Tyr Asp Thr Val Val Val Phe Asp Lys
 225 230 235 240

Val Arg Glu Asn Thr Glu Gly Phe Glu Gly Ser Arg Arg Arg Thr Tyr
 245 250 255

Ala Glu Gln Ala Asn Leu Ala Val Asn Gln Thr Phe Met Arg Ser Ile
 260 265 270

Ser Thr Thr Ile Ile Ser Ala Leu Pro Ile Ile Ala Leu Met Val Val
 275 280 285

Ala Val Trp Met Met Gly Val Gly Thr Leu Lys Asp Leu Ala Leu Ile
 290 295 300

Gln Leu Ile Gly Val Ile Glu Gly Thr Phe Ser Ser Val Phe Leu Ala
 305 310 315 320

Thr Pro Leu Leu Val Ser Leu Lys Asn Arg Leu Ser Lys Thr Lys Ala
 325 330 335

His Thr Ala Ser Val Met Lys Leu Arg Asp Gly Gln Ser Thr Leu Ile
 340 345 350

Asp Ala Thr Pro His Thr Asn Ala Asp Ala Ser Ala His Gly Thr Glu
 355 360 365

Ser Asp Thr Asp Gly Val Thr Pro Glu Ala Pro Ala Lys Arg Thr Val
 370 375 380

Ser Lys Pro Ile Val Asp Asp His Arg Ser Ser Gly Thr Trp Arg Pro
 385 390 395 400

Gly Arg Ser

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